# Safety Attribute Inspection (SAI) Data Collection Tool
# 4.1.2 Maintenance Certificate Requirements (AW)

## ELEMENT SUMMARY INFORMATION

**Purpose of This Element** (Certificate Holder's responsibility):

- To ensure that personnel directly in charge of maintenance, preventative maintenance, or alterations are appropriately certificated and adequately trained.

**Objective** (FAA oversight responsibility):

- To determine if the Certificate Holder's Maintenance Certificate Requirements process meets all applicable requirements of the Federal Aviation Regulations and FAA policies.
- To determine if the Certificate Holder's Maintenance Certificate Requirements process incorporates the System Safety Attributes.
- To identify any shortfalls in the Certificate Holder's Maintenance Certificate Requirements process.

## SUPPLEMENTAL INFORMATION

**Specific Regulatory Requirement(s) (SRRs):**

- SRRs:
  121.135(a)(1)
  121.135(b)(1)
  121.135(b)(2)
  121.135(b)(3)
  121.371(a)
  121.375
  121.378(a)
  121.378(b)
  121.383(a)(1)
  121.709(b)(3)

**Related CFR(s) & FAA Policy/Guidance:**

- Related CFRs:
  43.17(c)(1)
  43.17(c)(2)

- FAA Policy/Guidance:
  Intentionally left blank.

| SAI SECTION 1 − PROCEDURES ATTRIBUTE | | |
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| **Objective:** Procedures, instructions and information contained in Certificate Holder's manual are documented methods for accomplishing a process. Policies contained in the Certificate Holder's manual should establish the Certificate Holder's compliance posture. Policies may not be stand−alone statements but may be imbedded within procedures, instructions or information regarding a particular regulatory requirement. The questions in this section of the data collection tool are designed to assist the inspector in determining if the Certificate Holder's manual has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated who, what, when, where and how type questions. This section of the data collection tool contains policy questions, procedural questions and instructional or informational questions pertaining to various types of Certificate Holder requirements such as actions, prohibitions or resources (i.e., personnel, facilities, equipment, technical data, etc.). | | |
| ***Tasks*** | | |
| | To meet this objective, the inspector must accomplish the following tasks: | |
| 1 | Review the information listed in the Supplemental Information section of this data collection tool. | |
| 2 | Review the duties and responsibilities for management and other personnel identified by the Certificate Holder who accomplish the Maintenance Certificate Requirements process. | |
| 3 | Review the Certificate Holder's manual to ensure that it contains policies, procedures, instructions and information necessary for the Maintenance Certificate Requirements process. | |
| ***Questions*** | | |
| | To meet this objective, the inspector must answer the following questions: | |
| 1 | Does the Certificate Holder's manual content meet the specific regulatory and FAA policy requirements for a Maintenance Certificate Requirements process: | |
| 1.1 | Does the Certificate Holder's manual contain general policies for the Maintenance Certificate Requirements process that comply with the specific regulatory requirements?<br>SRRs: 121.135(b)(1) | ☐ Yes<br>☐ No, Explain |
| 1.2 | Does the Certificate Holder's manual cite the regulatory requirements listed in the Supplemental Information section of this SAI?<br>SRRs: 121.135(b)(3) | ☐ Yes<br>☐ No, Explain |
| 1.3 | Does the Certificate Holder's manual contain the duties and responsibilities for personnel who will accomplish the Maintenance Certificate Requirements process?<br>SRRs: 121.135(b)(2) | ☐ Yes<br>☐ No, Explain |
| 1.4 | Does the Certificate Holder's manual include instructions and information for personnel to meet the requirements of the Maintenance Certificate Requirements process?<br>SRRs: 121.135(a)(1); 121.378(a); 121.378(b) | ☐ Yes<br>☐ No, Explain |
| 1.5 | Does the Certificate Holder's manual specify that each person who is directly in charge of maintenance, preventive maintenance, or alteration must hold an appropriate airman certificate?<br>SRRs: 121.378(a); 121.383(a)(1)<br>*Related Design JTIs:*<br>• Check that the Certificate Holder's manual contains instructions and information personnel who are directly in charge of maintenance, | ☐ Yes<br>☐ No, Explain |

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| | preventative maintenance, or alterations, hold an appropriate airman certificate.<br>*Sources:* 121.378(a); 121.135(a)(1)<br>*Interfaces:* 1.3.1−aw; 1.3.4−aw; 1.3.6−aw; 2.1.1−aw; 2.1.1−op; 4.2.1−aw; 4.4.4−aw | |
| 1.6 | Does the Certificate Holder's manual specify that each person who is directly in charge of maintenance, preventive maintenance, or alterations be available for consultation and decision on matters requiring instruction or decision from higher authority than that of the persons performing the work?<br>SRRs: 121.378(b)<br>*Related Design JTIs:*<br>• Check that the Certificate Holder's manual include instructions and information necessary to allow each person who is "directly in charge" to perform the duty and responsibility to be available for consultation and decision making regarding matters requiring instruction or decision from higher authority than that of the persons performing the work.<br>*Sources:* 121.378(b); 121.135(a)(1)<br>*Interfaces:* 1.3.1−aw; 1.3.4−aw; 1.3.6−aw; 2.1.1−aw; 2.1.1−op; 4.4.4−aw; 7.1.1−aw; 7.1.2−aw | ☐ Yes<br>☐ No, Explain |
| 1.7 | Does the Certificate Holder's manual specify that each person who signs an aircraft log entry must be properly certificated?<br>SRRs: 121.709(b)(3) | ☐ Yes<br>☐ No, Explain |
| 1.8 | Does the Certificate Holder's manual specify that each person who performs Required Inspections must be appropriately certificated?<br>SRRs: 121.371(a); 121.378(a)<br>*Related Design JTIs:*<br>• Check that the Certificate Holder's manual include instructions and information necessary for each person who is performing required inspections to hold an appropriate airman certificate.<br>*Sources:* 121.378(a); 121.135(a)(1)<br>*Interfaces:* 1.3.1−aw; 1.3.4−aw; 1.3.6−aw; 2.1.1−aw; 2.1.1−op; 4.2.1−aw; 4.4.4−aw | ☐ Yes<br>☐ No, Explain |
| 1.9 | Does the Certificate Holder's manual specify that each person who signs the aircraft airworthiness release must be properly certificated?<br>SRRs: 121.709(b)(3) | ☐ Yes<br>☐ No, Explain |
| 1.10 | Does the Certificate Holder's manual specify that each person who is directly in charge of maintenance must be adequately trained?<br>SRRs: 121.375<br>*Related Design JTIs:*<br>• Check that the Certificate Holder's training program ensures that each person (including inspection personnel) who determines the adequacy of work done is fully informed about procedures and techniques and new equipment in use and is competent to perform his/her duties.<br>*Sources:* 121.375<br>*Interfaces:* 1.3.2−aw; 2.1.1−aw; 2.1.1−op; 4.2.1−aw; 4.2.2−aw | ☐ Yes<br>☐ No, Explain |

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| 1.11 Does the Certificate Holder's Maintenance Certificate Requirements process comply with the related requirements of 14 CFR Part 43.17(c)?<br>Related CFRs: 43.17(c)(1); 43.17(c)(2)<br>*Related Design JTIs:*<br>• Check that the Certificate Holder's manual include instructions and information for personnel concerned which permits a person holding a valid Canadian Department of Transport license (Aircraft Maintenance Engineer) and appropriate ratings with respect to a U.S.−registered aircraft located in Canada, to perform maintenance, preventative maintenance, alterations and approve the affected aircraft for return to service.<br>*Sources:* 121.135(a)(1); 43.17(c)(1)<br>*Interfaces:* 1.1.1−aw; 1.3.1−aw; 1.3.6−aw; 1.3.7−aw; 2.1.1−aw; 2.1.1−op<br>• Check that the Certificate Holder's manual include instructions and information for personnel concerned to permit an Approved Maintenance Organization (AMO), whose system of quality control for the maintenance, alteration, and inspection of aeronautical products has been approved by the Canadian Department of transport, with respect to a U.S. – registered aircraft located in Canada or other U.S. aeronautical products transported to Canada from the United States, to perform maintenance, preventative maintenance, alterations and approve the affected products for return to service.<br>*Sources:* 121.135(a)(1); 43.17(c)(2)<br>*Interfaces:* 1.1.1−aw; 1.3.1−aw; 1.3.6−aw; 1.3.7−aw; 2.1.1−aw; 2.1.1−op<br>• Check that the Certificate Holder's manual include instructions and information for personnel concerned to permit a person who is an authorized employee of a Approved Maintenance Organization (AMO) performing work for such a company may, with respect to a U.S. – registered aircraft located in Canada or other U.S. aeronautical products transported to Canada from the United States, perform maintenance, preventative maintenance, alterations and approve the affected products for return to service.<br>*Sources:* 121.135(b)(1); 43.17(c)(2)<br>*Interfaces:* 1.1.1−aw; 1.3.1−aw; 1.3.6−aw; 1.3.7−aw; 2.1.1−aw; 2.1.1−op | ☐ Yes<br>☐ No, Explain<br>☐ Not Applicable |
| 1.12 If alternate procedures exist for use during irregular conditions, do the alternate procedures provide an equivalent level of safety to achieve the same results as the primary procedures? | ☐ Yes<br>☐ No, Explain<br>☐ Not Applicable |

| SAI SECTION 1 − PROCEDURES ATTRIBUTE −Drop Down Menu |
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| 1. No procedures, policy, instructions or information specified. |
| 2. Procedures or instructions and information do not identify (who, what, when, where, how). |
| 3. Procedures, policy or instructions and information do not comply with CFR. |
| 4. Procedures, policy or instructions and information do not comply with FAA policy and guidance. |
| 5. Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.). |
| 6. Procedures, policy or instructions and information unclear or incomplete. |
| 7. Documentation quality (e.g., unreadable or illegible). |
| 8. Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM − Flight Operations Manual to GMM − General Maintenance Manual, etc.). |
| 9. Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic). |
| 10. Resource requirements incomplete (personnel, facilities, equipment, technical data). |
| 11. Other. |

| SAI SECTION 2 − CONTROLS ATTRIBUTE | | |
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| **Objective:** Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the data collection tool are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the manual system to ensure that the most important manual policies, procedures or instructions and information will be complied with.<br><br>Controls may be in the form of "administrative controls" which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to the associated who, what, when, where and how type questions. Controls may also be in the form of "engineered controls" such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.). | | |
| ***Tasks*** | | |
| | To meet this objective, the inspector must accomplish the following tasks: | |
| 1 | Review the control questions below. | |
| 2 | Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the controls that it has documented. | |
| ***Questions*** | | |
| | To meet this objective, the inspector must answer the following questions: | |
| 2 | Are the following controls built into the Maintenance Certificate Requirements process: | |
| 2.1 | Is there a control in place to ensure that personnel, directly in charge of maintenance, are available for consultation when supervising personnel? | ☐ Yes<br>☐ No, Explain |
| 2.2 | Is there a control in place to ensure that personnel directly in charge of maintenance are adequately trained? | ☐ Yes<br>☐ No, Explain |
| 2.3 | Is there a control in place to ensure that personnel directly in charge of maintenance are appropriately certificated? | ☐ Yes<br>☐ No, Explain |
| 2.4 | Is there a control in place to ensure that required inspection items are performed by an authorized and appropriately certificated airman? | ☐ Yes<br>☐ No, Explain |
| 2.5 | Is there a control in place to ensure that the aircraft airworthiness release is signed by an authorized and properly certificated airman? | ☐ Yes<br>☐ No, Explain |
| 2.6 | Is there a control in place to ensure that the aircraft log entry is signed by an authorized and properly certificated airman? | ☐ Yes<br>☐ No, Explain |
| 2.7 | Does the Certificate Holder have a documented method for assessing the impact of any changes made to the controls in the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain |

| **SAI SECTION 2 − CONTROLS ATTRIBUTE −Drop Down Menu** |
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| 1. No controls specified. |
| 2. Documentation for the controls do not identify (who, what, when, where, how). |
| 3. Controls incomplete. |
| 4. Controls could be circumvented. |
| 5. Controls could be unenforceable. |
| 6. Resource requirements incomplete (personnel, facilities, equipment, technical data). |
| 7. Other. |

| SAI SECTION 3 − PROCESS MEASUREMENT ATTRIBUTE | | |
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| **Objective:** Process measurements are used by the Certificate Holder to measure and assess its processes to identify and correct problems or potential problems and to make improvements to the processes. The questions in this section of the data collection tool are designed to assist the inspector in determining if the Certificate Holder measures or assesses information to identify, analyze and document potential problems with the process. Process measurements are basically a Certificate Holder's internal evaluation or auditing of the most important policies, procedures or instructions and information associated with an element.<br><br>To prevent the duplication of work that would otherwise occur, Process Measurements are most commonly addressed through a combination of auditing features contained in both the Certificate Holder's Safety Program/Internal Evaluation Program (for Operations and Cabin Safety related issues) and the auditing function of the Continuous Analysis &Surveillance System (for Airworthiness or Maintenance/Inspection related issues). The Director of Safety and the Quality Assurance Department often work in conjunction to accomplish this function for the Certificate Holder. This approach simply requires amendment of the Safety Program/Internal Evaluation Program audit forms or checklists and the Continuous Analysis &Surveillance System audit forms or checklists to include the specific process measurements for each element. | | |
| ***Tasks*** | | |
| | To meet this objective, the inspector must accomplish the following tasks: | |
| 1 | Review the process measurement questions below. | |
| 2 | Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the process measurements that it has documented. | |
| ***Questions*** | | |
| | To meet this objective, the inspector must answer the following questions: | |
| 3 | Does the Certificate Holder's Maintenance Certificate Requirements process include the following process measurements: | |
| 3.1 | Process measurements that would reveal when personnel directly in charge of maintenance were not available for consultation when supervising personnel? | ☐ Yes<br>☐ No, Explain |
| 3.2 | Process measurements that would reveal when personnel directly in charge of maintenance were not adequately trained? | ☐ Yes<br>☐ No, Explain |
| 3.3 | Process measurements that would reveal when personnel directly in charge of maintenance were not appropriately certificated? | ☐ Yes<br>☐ No, Explain |
| 3.4 | Process measurements that would reveal when required inspection items were not performed by appropriately certificated and authorized personnel? | ☐ Yes<br>☐ No, Explain |
| 3.5 | Process measurements that would reveal when aircraft airworthiness releases were not signed by appropriately certificated and authorized personnel? | ☐ Yes<br>☐ No, Explain |
| 3.6 | Process measurements that would reveal when aircraft log entries were not signed by appropriately certificated and authorized personnel? | ☐ Yes<br>☐ No, Explain |
| 3.7 | Does the Certificate Holder document its process measurement methods and results? | ☐ Yes<br>☐ No, Explain |

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| 3.8 | Does the organization that conducts the process measurements have direct access to the person with the responsibility for the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain |

| SAI SECTION 3 − PROCESS MEASUREMENT ATTRIBUTE −Drop Down Menu |
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| 1. No process measurements specified. |
| 2. Documentation for the process measurements does not identify (who, what, when, where, how). |
| 3. Inability to identify negative findings. |
| 4. No provisions for implementing corrective actions. |
| 5. Ineffective follow−up to determine effectiveness of corrective actions. |
| 6. Resources requirements (personnel, facilities, equipment, technical data). |
| 7. Other. |

| SAI SECTION 4 − INTERFACES ATTRIBUTE | | |
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| **Objective:** Interfaces are used by the Certificate Holder to identify and manage the interactions between processes. The questions in this section of the data collection tool are designed to assist the inspector in determining whether or not interactions between the procedures, policies or instructions and information associated with other independent processes within the Certificate Holder's organization are documented. Written procedures, policies or instructions and information that are interrelated and located in different manuals within the Certificate Holder's manual system need to be consistent and complement each other. For the interfaces to be effectively managed, it is not only important to identify what the interfaces are, but it is imperative to document the specific location of the interfaces within the Certificate Holder's manual system. | | |
| ***Tasks*** | | |
| | To meet this objective, the inspector must accomplish the following tasks: | |
| 1 | Review the interfaces associated with the Maintenance Certificate Requirements process that have been identified along with the individual questions in the Procedures Section (1) of this data collection tool. | |
| 2 | Review the Certificate Holder's policies, procedures or instructions and information to gain an understanding of the interfaces that it has documented. | |
| ***Questions*** | | |
| | To meet this objective, the inspector must answer the following questions:<br><br>NOTE: ALL EXPLANATIONS IN THE DROP DOWN MENU FOR "NO" ANSWERS MUST INCLUDE THE INDIVIDUAL QUESTION NUMBER FROM THE PROCEDURES SECTION (1) OF THIS DATA COLLECTION TOOL AND THE ELEMENT NUMBER(S) OF THE INTERFACE(S) THAT WERE NOT ADDRESSED. | |
| 4 | Does the Certificate Holder's manual: | |
| 4.1 | Properly address the interfaces that are identified along with the individual questions in the Procedures Section (1)? | ☐ Yes<br>☐ No, Explain |
| 4.2 | Document a method for assessing the impact of any changes to the associated interfaces within the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain |
| 4.3 | List any additional interfaces identified during the accomplishement of this SAI. | |

| SAI SECTION 4 − INTERFACES ATTRIBUTE<br>−Drop Down Menu |
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| 1. No interfaces specified. |
| 2. The following interfaces not identified within the Certificate Holder's manual system: |
| 3. Interfaces listed are inaccurate. |
| 4. Specific location of interfaces not identified within the manual system. |
| 5. Other |

| SAI SECTION 5 − MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE | | |
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| **Objective:** The questions in this section of the data collection tool address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified and knowledgeable person who is responsible for the process, is answerable for the quality of the process and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.) | | |
| ***Tasks*** | | |
| | To meet this objective, the inspector must accomplish the following tasks: | |
| 1 | Identify the person who has overall responsibility for the Maintenance Certificate Requirements process. | |
| 2 | Identify the person who has overall authority for the Maintenance Certificate Requirements process. | |
| 3 | Review the duties and responsibilities of the person(s), documented in the Certificate Holder's manual. | |
| 4 | Review the appropriate organizational chart. | |
| ***Questions*** | | |
| | To meet this objective, the inspector must answer the following questions: | |
| 5 | Are the following aspects of the Responsibility and Authority Attribute addressed in the Maintenance Certificate Requirements process: | |
| 5.1 | Does the Certificate Holder's manual clearly identify who is repsonsible for the quality of the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain<br>Name/Title: |
| 5.2 | Does the Certificate Holder's manual clearly identify who has authority to establish and modify the policies, procedures, instructions and information for the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain<br>Name/Title: |
| 5.3 | Does the Certificate Holder's manual include the duties and responsibilities of those who manage the work required by the Maintenance Certificate Requirements process?<br>SRRs: 121.135(b)(2) | ☐ Yes<br>☐ No, Explain |
| 5.4 | Does the Certificate Holder's manual include instructions and information for those who manage the work required by the Maintenance Certificate Requirements process?<br>SRRs: 121.135(a)(1) | ☐ Yes<br>☐ No, Explain |
| 5.5 | Does the Certificate Holder's manual cearly and completely document the authority for this position? | ☐ Yes<br>☐ No, Explain |
| 5.6 | Does the Certificate Holder's manual clearly and completely document their qualifications standards for the person having responsibility for the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain |
| 5.7 | Does the Certificate Holder's manual clearly and completely document their qualification standards for the person having authority to establish and modify the Certificate Holder's policies, procedures, instructions and information for the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain |

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| 5.8 | Does the Certificate Holder's manual clearly and completely document the procedures for delegation of authority for the Maintenance Certificate Requirements process? | ☐ Yes<br>☐ No, Explain |

| SAI SECTION 5 − MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE −Drop Down Menu |
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| 1. Not documented. |
| 2. Documentation unclear. |
| 3. Documentation incomplete. |
| 4. Other. |